

Lesson 24 ~ Solving Two-Step Equations

Name _____ Period _____ Date _____

Solve each equation for the variable. Show your work and check your solution.

1. $4x + 6 = 22$

2. $\frac{y}{5} - 7 = -1$

3. $-10 = 3m + 5$

4. $\frac{h}{2} + 3.5 = 7.1$

5. $8y + 1 = -15$

6. $0.5x - 8 = 12$

7. $-1 = \frac{p}{9} - 3$

8. $\frac{1}{3}d + 6 = 10$

9. $\frac{w}{-4} + 10 = 3$

10. $\frac{a}{3} - 1.2 = 0.4$

11. $40 = 4 - 6x$

12. $\frac{3}{4}y - 1 = 2$

13. Katrina bought a new sofa. She was able to pay \$100 at the time she received the sofa. She will pay \$22 each month on the balance. The original cost of the sofa was \$298.
- Let x represent the number of months needed to pay off the cost of the sofa. Explain how the equation $100 + 22x = 298$ represents this situation.
 - Solve the equation. How many months will it take Katrina to pay off the sofa?
14. Hank is thinking of a number. If he multiplies his number by seven and then adds 10, he gets 59. What is Hank's number?